IT Strategy for the Commonwealth
FY 2009 – 2011:

Building a Technology Foundation for the Future

August 2008

About this Document

This document outlines the high level strategy for information technology across Massachusetts state government through FY 2011. It defines the vision for IT, the key initiatives needed to realize that vision, and the roadmap and guidelines for pursuing those initiatives. IT leaders from across the Commonwealth collaborated in developing this plan. It is sponsored by the Commonwealth's principal IT advisory groups, the Information Technology Advisory Board and the CIO Cabinet. It applies to all Executive Department agencies and to other government entities that choose to participate. We believe this plan will be relevant and helpful for business leaders and IT leaders alike. We thank the scores of people inside and outside state government who contributed their time, energy, and helpful input to this undertaking.

Document Revision History

Date	Version	Comments
November , 2008	Final Published	Incorporates revisions due to comments received during public review: • Added "Imagine If" scenarios in Executive Summary • Revised Goals statement for Enhanced Procurement Processes initiative to include leveraging automation wherever possible

• Contents •

• Appendices •

IT Strategy for the Commonwealth
FY 2009 – 2011:
Building a Foundation for the Future

August 2008

I. Executive summary

In today's environment information technology (IT) underlies almost everything we do. Over the years, the Commonwealth has come to rely more and more on IT for the operation of state government, and we have seen that IT can have a profoundly positive impact on making government more efficient, more accessible and more responsive to the public.

But we are not taking full advantage of the power of IT. Although the Commonwealth has a wide array of information systems in place, many of these are aging and no longer meeting all the modern-day business needs of government. Perhaps more importantly, these systems for the most part cannot work effectively together, preventing agencies from partnering in providing the kinds of information and services the public has come to expect in the Internet age. Across government entities, IT planning has been fragmented, and we find uneven levels of IT services and skills. In short, though once Massachusetts was considered a leader in IT innovation, we have fallen back into the pack.

Today we have a unique opportunity. First, there is a strong sense of collaboration and consensus among IT leaders throughout most of state government. Indeed, this IT Strategy for the Commonwealth represents the thinking of dozens of IT leaders as well as many agency heads. Second, as a result of the recently passed "Act Providing for Capital Facility Repairs and Improvements for the Commonwealth," more commonly known as Bond Bill IV, we have a pool of financial resources available for wise investment in collective action.

We urgently need to bring our IT environment up to date to pave the way for future innovation. Our vision is that the Commonwealth should have an IT environment that enables:

VISION

- Efficient and easily accessible services for all constituents
- Open and transparent engagement with citizens of the Commonwealth
- Accurate and timely data for policy making, service delivery, and results evaluation

Imagine If…

- Constituents could update their change of address once and have all their records updated
- Citizens could be empowered with easy ways to provide input on policies that are most relevant and important to them

- Data from many sources could be brought together to create new services and improve existing ones

This document expands on this simple vision, explains why it is vitally important, and charts a course of action to achieve it. Our first steps over the next three years are to build a solid foundation that can support new applications and shared services. The foundation must comprise:

FOUNDATIONAL BUILDING BLOCKS

- A robust, agile enterprise IT infrastructure
- Shared services and applications
- Common, effective management practices

The plan for building this foundation entails seven key initiatives. These initiatives have been defined through a broad-based consensus process involving IT leaders and some business leaders from across Commonwealth government entities. The initiatives are:

SEVEN KEY INITIATIVES

- Secretariat consolidation
- Shared Service Oriented Architecture (SOA) infrastructure
- Network architecture
- Enterprise security plan
- Civic engagement strategy
- Identity management
- Enhanced procurement processes

In addition to these, four supporting initiatives, which are already underway, represent additional required components of the foundation:

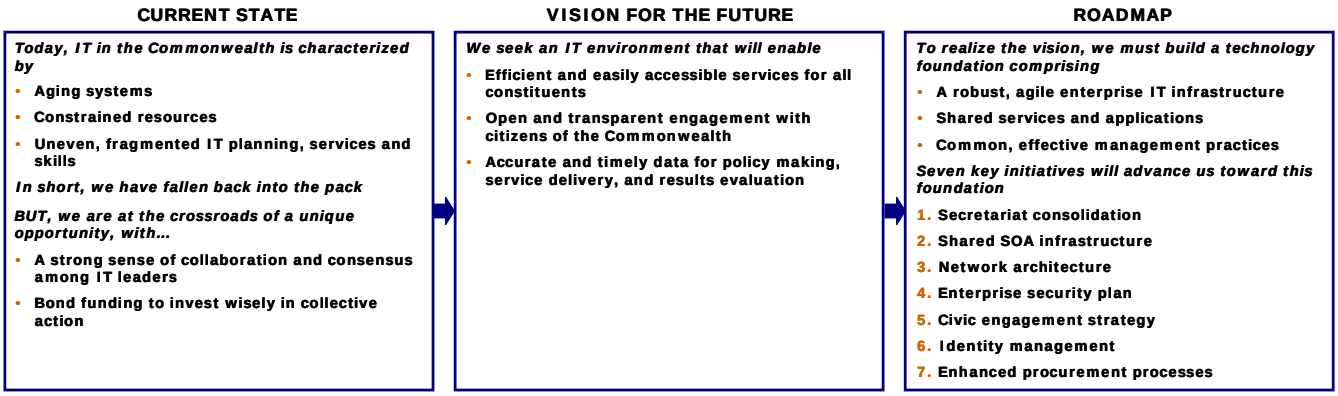
SUPPORTING INITIATIVES

- Second data center
- Systems modernization
- IT recruitment and training
- Project management methodology

This plan outlines the approach, responsibilities, and major milestones for each initiative, balancing ideals with what is realistic, feasible, and practical, and in all cases guided by the opportunities and constraints at hand. It is a plan that requires collaboration among IT leaders and groups throughout state government, recognizing that we cannot afford to work as islands. We must work together to address common issues and to realize the benefits that today's technology has to offer.

The robust and agile technology foundation that results from this work ultimately will make it possible to implement the new kinds of systems and services that Commonwealth agencies must have to support their current and emerging business plans in the near term and through future administrations for years to come.

Figure 1. Summary of the Strategic Plan



II. Background

A. Strategic planning process

We designed this process to be rapid, high-level, and visionary, as well as actionable. Our approach has been to:

- Achieve a coherent plan rapidly by
  - Leveraging what we already know as a starting point, building on the findings of earlier planning efforts and studies.
  - Reviewing the IT strategies of other state governments and learning from their successes.
  - Surveying and understanding industry-wide technology trends.
  - Acknowledging public expectations of how things should work in a an era of pervasive technology.
- Set an overall IT direction at a high level, recognizing that follow-on processes will be needed to flesh out detailed project plans.
- State a clear vision that will crystallize the direction of IT in the Commonwealth and that will resonate with business and IT leaders across government entities because it
  - Lays the foundation for future initiatives both known and unanticipated.
  - Leads to new levels of service to—and engagement with—residents and businesses of the Commonwealth.
- Ensure that recommendations emerging from the planning process are actionable in that they translate into specific initiatives that can be defined clearly and implemented with resources that will realistically be available over the next three years.

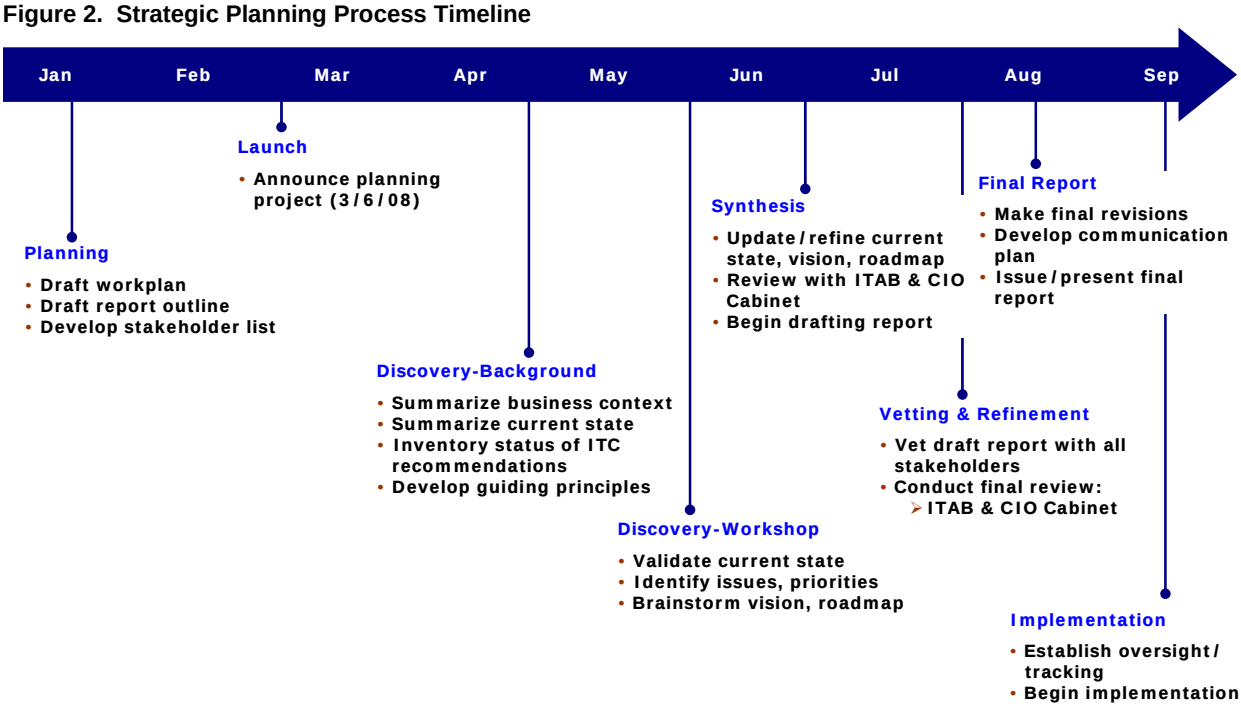
We began this planning process in January 2008 with a small working group to create a workplan for the effort. Key assumptions were that we would avoid using a large cadre of consultants to gather detailed current state data, and that instead we would develop a high level plan focusing on a small set of initiatives that IT groups across multiple agencies could work on collaboratively. We acknowledged up front that the strategic plan would not be an exhaustive list of all IT projects and initiatives; rather, the major output would be a framework for subsequent, lower-level planning and decision-making.

We used the 2003 IT Commission Report as a starting point, first updating ourselves on the many recommendations they made and the current status of each. We relied on two principal state-wide IT advisory groups, the Information Technology Advisory Board (ITAB) and the CIO Cabinet, for guidance

on the scope and content of this plan. The IT Council[1] also provided input as part of their regular monthly meetings.

On June 3, 2008, we held a day-long workshop at the Harvard Kennedy School of Government entitled *Visioning the Future: Developing the IT Strategy for the Commonwealth of Massachusetts.* The program was designed and facilitated by Professor Jerry Mechling. Invitees provided input on priorities and vision prior to the session, and Professor Mechling synthesized this material as a launching point for the workshop. Fifty-six IT and business leaders from across the Commonwealth attended the workshop. Through a series of full-group and breakout sessions, we were able to hone in on the key IT-related issues facing the Commonwealth and to reach consensus on basic priorities and the foundational direction that should be reflected in the strategic plan. Appendix B shows the agenda for this program, and appendix C is a list of participants.

Figure 2. Strategic Planning Process Timeline



B. Case for action

Information technology already supports virtually all business processes in state government. We have had many successes over the years in using IT to reduce the cost of government operations and to provide data for decision-making. Earlier in this decade we began offering public access to information and some state services via the Internet.

But as technical innovation advances, IT has far more potential—not yet fully-realized in Massachusetts—to enable state government to work better and to better serve the public. IT can:

- Transform how government works, not only stretching dollars to "do more with less" but to do it more effectively through new partnerships among government agencies and between agencies and external entities.
- Put a unifying face on a complex and disparate government enterprise by pulling together different information resources and transaction sets that match the logic and

[1] See appendix A for a description of the roles and membership of ITAB, CIO Cabinet, and IT Council.

needs of citizens and businesses rather than reflecting the arcane structure of government.

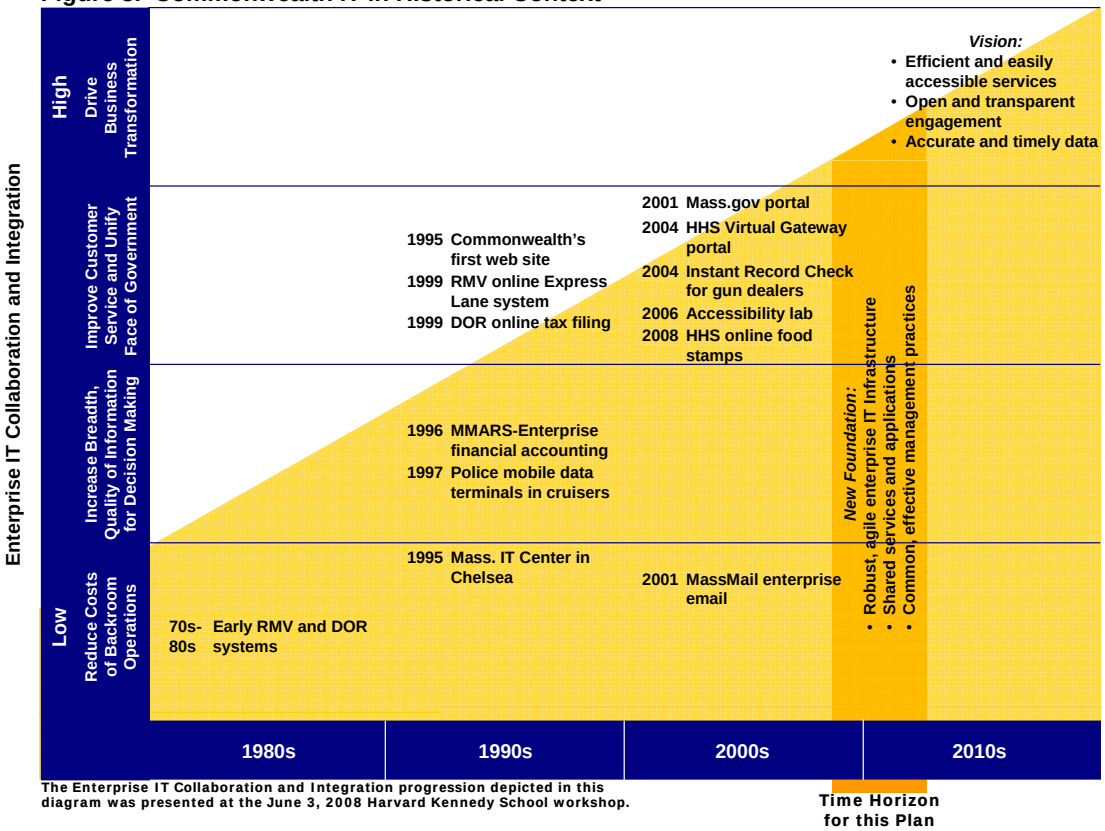
- Mine information while respecting privacy protections to compile new kinds of analyses heretofore impractical or impossible in order to monitor and evaluate the efficacy of government services and operations, to identify and collect additional revenue to which the Commonwealth is entitled, and more generally, to enable a more routine and comprehensive understanding of the state of the Commonwealth to support policy making.

It has been five years since the IT Commission Report, the last major review of the management of IT in the Commonwealth. In the intervening years we have fulfilled—or made good progress on—many of the ITC recommendations. But some of the issues identified by the Commission remain open to this day. Meanwhile, during this time new government business needs and objectives have emerged, while at the same time the scope and power of technology and innovation have continued to advance. The time has come to review where we are in the use of IT in state government and where we need to be headed. It is time to renew and clarify our plan for the future so that we can share a common vision across agencies and work together to use our IT resources as wisely and effectively as possible.

III. Current state

At the beginning of this decade, Massachusetts was considered among the leaders in information technology in state government. Along with just a few other states, the Commonwealth was an early adopter of web technology for making information and services available to the public online; indeed, today Mass.gov is an effective portal that attracts some 2 million visitors per month. Many other aspects of IT in Massachusetts government were also well-developed at the time. For example, early on we had a broad range of high-quality internal data processing systems that support individual agency operations. In addition, we also implemented enterprise-level accounting and human resources systems.

Figure 3. Commonwealth IT in Historical Context



The Enterprise IT Collaboration and Integration progression depicted in this diagram was presented at the June 3, 2008 Harvard Kennedy School workshop.

Today, almost all states have caught up to Massachusetts, and some have moved beyond. From an IT perspective, we have fallen back into the pack, no longer in step with roughly similar states such as Michigan, North Carolina, Washington, and New York. Not only have many other states broadened the array of online services and transaction capabilities that they provide to citizens and businesses, but some have achieved much greater levels of enterprise-wide integration, which in turn streamlines operations across government entities and affords opportunities for effective services not previously thought possible.

A common theme in discussions about Commonwealth IT is governance. Earlier studies, including the 2003 IT Commission Report, have cited the structure of government, with its many autonomous entities, as an impediment to sound, efficient, enterprise-wide planning, standardization, and effective implementation of IT. While of course we are always mindful of the diversity of agency needs and priorities in state government, we find today a remarkable spirit of collaboration and consensus across agencies. The Information Technology Advisory Board (ITAB), established by statute on recommendation of the former IT Commission, as well as the recently reconstituted CIO Cabinet and IT Council have all helped to bring together IT leaders and managers from all quarters of state government to identify and solve problems of common concern. Indeed, it is because of this recognition of common purpose and alignment of goals that we are able to put forth this plan. Appendix A describes the current IT governance and advisory structure for Commonwealth IT.

Based on discussions at the June workshop and other cross-agency planning forums, in the collective opinion of IT leaders from across Massachusetts state government, key IT issues facing us today include:

- Technology foundation. There are many unrealized opportunities for a more comprehensive and robust enterprise-wide IT infrastructure and shared services. We urgently need an enterprise network architecture as well as other foundational components described later in this document.
- Procurement. We do not fully leverage the Commonwealth's buying power to negotiate favorable state-wide procurement terms for IT goods and services. Moreover, we need better, more standardized terms and practices for dealing with vendors that provide vital software and development services.
- IT workforce. The Commonwealth's IT workforce is aging, with at least 30% eligible to retire in the next five years. In many cases, our IT workers lack the up-to-date skills needed to work effectively with today's technologies. Compounding these concerns, we find it very difficult to recruit new technical staff with the needed skills in what remains a competitive technical labor market.
- Planning and communication. Though the Commonwealth has put together many IT plans in the past, they have lacked clear vision, and we have not always been successful at demonstrating to business leaders the rationale for investment in IT beyond meeting basic, often narrowly-focused operational needs. Even when priorities do emerge, our record of timely follow-through on proposed initiatives has been mixed.
- Funding. While tight budgets are always a challenge, we have been particularly constrained in planning for and building in funding for systems maintenance and upgrade, so that even when we are able to invest in new systems through targeted capital investments, they degrade over time until they become obsolete. Funding levels for IT have been flat or declining. It is arduous even to identify all pockets of IT spending in state government.

The following table drills further into the current state of IT in the Commonwealth.

Table 1. Current State Themes

	Strengths	Challenges
1 Management Practices and Resources		
1.1 Financing and planning	• Bond bill passed	• No clear picture of level of IT investment for the Commonwealth • Inconsistent IT planning processes across agencies • Legislative mandates affect IT investments • Funding for credit card fees
1.2 Procurement practices	• Multiple statewide IT contracts with very competitive pricing	• Procurement process very complex and lengthy • Missing opportunities to leverage state purchasing power
1.3 HR practices	• Strong committed IT workforce • IT workforce diversity above industry standard	• Aging workforce • Difficult to recruit IT staff in current competitive environment • Misalignment between current IT skills and needs • Non-standard IT job classifications
1.4 IT Risk management	• Established CISO position • Cross-branch Enterprise Security Board shares best practices and recommends policies • Annual disaster recovery exercises and contracts	• Inability to keep up with increasing pace of security threats • Lack of adequate disaster recovery facilities • Incomplete business continuity planning • Risk assessments inconsistently incorporated in IT planning and design • Risk management needs improvement
1.5 Project management	• Some established Project Management Offices	• Multiple and inconsistent use of project management methodologies • Mixed record regarding on-time, on-budget, on-quality project delivery
2 IT Architecture and Infrastructure		
2.1 Enterprise policies and standards	• Enterprise Technology Office and target enterprise architecture in place	• Compliance with standards uneven resulting in highly complex IT environment
2.2 Shared infrastructure services	• Some components exist (XML Gateway, CommBridge, SAN, MAGNet, Mass.gov, VOIP)	• No comprehensive enterprise network plan/architecture • Limited funding to expand shared infrastructure (Identity Management, Enterprise Service Bus, Service Registry)
2.3 Operations Support	• Relatively stable systems and applications	• Unknown number and variable quality of data centers • Lack of clarity on IT services and costs

	Strengths	Challenges
3 Shared IT Services and Strategic Applications		
3.1 Shared business services	• Some shared business services (MassMail, e-payments, GIS, Mass.gov)	• Could be more widely leveraged • Need better shared governance and cost models • Inconsistent data definitions
3.2 Enterprise applications	• NewMMars, HR/CMS, Information Warehouse, LMS/PACE in place	• Governance models not well defined
3.3 Critical agency applications	• Increase in availability of web-based applications and transactions • Innovative consolidation efforts such as Virtual Gateway	• Aging agency apps (MassTax, ALARS, CJIS, others) difficult to maintain and expensive

As IT has continued to reach further and further into the operation of state government, expenditures for IT-related acquisitions, services, and operations have remained flat, in fact declining slightly over the last few years. Table 2 summarizes expenditures for IT across the Commonwealth.

Table 2. IT Expenditures across All State Government Entities[2]

All figures $000,000s	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Capital Funds	**83.3**	**90.2**	**74.8**	**98.1**	**66.3**	**76.9**
Operating Funds	**164.2**	**168.3**	**194.6**	**210.5**	**236.7**	**225.7**
Trust Funds	**141.0**	**153.1**	**148.2**	**139.7**	**143.5**	**139.0**
Subtotal	**388.5**	**411.6**	**417.6**	**448.3**	**446.5**	**441.6**
FTE Expenditure (est)	**124.3**	**131.7**	**133.6**	**143.4**	**142.9**	**141.3**
TOTAL	**512.8**	**543.3**	**551.2**	**591.7**	**589.4**	**582.9**

IV. Vision for the future

A. Vision for IT in the Commonwealth

Our vision for IT in the Commonwealth is simple enough in concept: We seek an IT environment that will enable:

- Efficient and easily accessible services for all constituents. Imagine if citizens could access government information and services through a variety of means—computers, cell phones, PDAs—whatever is most convenient and adaptable to their particular needs and styles of communication. And imagine if these services were organized in a way that fit the circumstances of the user rather than the structure of government.

[2] Based on an IT expenditures query from the Information Warehouse as of 8/21/08 for all Commonwealth entities (three branches including higher education plus constitutional offices). The FTE expenditure estimate represents 32% of total IT spending.

- Open and transparent engagement with citizens of the Commonwealth. Imagine if the wealth of information the Commonwealth collects could be presented in usable components that could support citizens and business partners in making decisions important to them and that mechanisms are available for citizens to provide input for policies that are important to them.
- Accurate and timely data for policy making, service delivery, and results evaluation. Imagine if data from many sources could be brought together to create new services and improve existing ones. And routine reports and "dashboards" could inform agency heads about the operating effectiveness of their agencies and the opportunities for greater efficiency and better outcomes.

Consider a few sample scenarios to see what this vision could mean in practice. ***Imagine if…***

Efficient and Easily Accessible Services

A small non-profit organization doing business with the Commonwealth

Scenario. You are a small non-profit organization doing business with a couple of Commonwealth agencies. Each year you must file multiple reports with the offices of the Attorney General, the Secretary of the Commonwealth, the Operational Services Division, the Department of Revenue and each agency with which you have a contract (to name a few).

In today's environment, you have to prepare and send in separate manual reports or file the information online individually with each agency—if the agency even offers the online services you need.

Imagine if you could access a single online service that would communicate automatically in the background with each government entity to present to you information from your last filing, allow you to make any necessary revisions or additions, and in turn communicate this information back to the various agencies and their systems. You would immediately get a dated confirmation of your filings for your records. You could also view your past history of filings online, view when your upcoming filings are due and elect to receive reminders for future filings.

Benefits for the user and the Commonwealth:

- Increased data accuracy.
- Time savings for both filers and agency staff that have to process reports.
- Decrease in customer service calls regarding filing requirements, status of filed reports, etc.
- Increased customer satisfaction due to easier access to information and streamlined processes.
- Increased compliance with filing requirements resulting in less follow-up work for staff.

Barriers—why we cannot do this today. The majority of agency systems in place today are designed to serve the needs of individual agencies. The technical architectures were not designed to easily communicate with other systems. Sharing system functionality and data where appropriate requires complex, one-off integration efforts. We also do not currently have a common, shared way to identify individuals and organizations that have to interact with multiple state organizations.

Roadmap—in order to make this vision a reality the Commonwealth needs to:

- Build shared technical services that government entities can use to communicate easily and routinely across disparate systems and data (*Key Initiative: Shared SOA Infrastructure*[3]).
- Collaborate across entities to create a common, shared way to identify individuals and organizations (*Key Initiative: Identity Management*).
- Build common business services, such as the Commonwealth filing service, that presents a single face to customers and at the same time meets the needs of the sponsoring Commonwealth entities (*Key Initiative: Shared SOA Infrastructure*).

A citizen interacting with government

Scenario. As a citizen you need to interact with several Commonwealth agencies on a periodic basis. For example, you may need to file your estimated taxes, renew your car registration, make a reservation at a campground and obtain a fishing license for your upcoming vacation, enroll your child with a licensed day care provider and find out where and when your local farmer's market is open.

Today, you can access the state's Mass.gov website and search individually for each transaction or piece of information. You then need to access each individual agency's web pages and transactions to complete your business.

Imagine if you could create your own tailored "My Mass.gov" page on the state's web site. You could securely log in with your ID and password and see your individual home page. This page would contain "windows" into each transaction or type of information you need to access frequently. You could send in your estimated tax payment and immediately receive confirmation and a receipt. You could configure alerts to remind you of significant events or due dates that could be emailed to you or sent to your cell phone. Through this page you could also choose to notify various agencies of significant changes of information or events in your life such as a change of address.

Benefits for the user and the Commonwealth:

- A single point of access to multiple government services and information of relevance to the individual citizen.
- Simplified log-in procedure that can be used by multiple agencies to make citizen access easier.
- Ability for tailored real time two-way interaction between the citizen and government agencies.
- Decrease in customer service calls.
- Increased customer satisfaction due to easier access to information and transactions.

Barriers—why we cannot do this today. The Commonwealth's current portal software for Mass.gov can support the creation of individualized, tailored "My Mass.gov" pages created by citizens and businesses. However, the state does not currently have an enterprise identity management system that could provide simplified log-on authentication for citizens and businesses. Without this shared service, it is not possible to provide secure, private access to information and transactions without requiring separate log-ons for access to different transactions. Many government services are still

---

[3] Key and supporting initiatives for building the IT foundation are described in detail in Sections IV B and C of the Plan.

handled by older systems that cannot process transactions in real time, instead requiring overnight batch processing, and such systems cannot provide real time validation and confirmations.

Roadmap—in order to make this vision a reality the Commonwealth needs to:

- Collaborate across entities to create a common, shared way to identify individuals and organizations (*Key Initiative: Identity Management*).
- Build web services that can access agency information and present it through various channels such as web, cell and smart phones (*Key Initiative: Shared SOA Infrastructure*).
- Modernize legacy systems so they can process transactions and issue confirmations in as close to real time as possible (*Supporting Initiative: System Modernization*).

Open and Transparent Engagement

A caseworker providing social services

Scenario. You are a caseworker providing services to families with multiple needs. You currently use the Health and Human Services Virtual Gateway eligibility application to determine what social and health services your clients can access. But these families need much more. So you have to conduct searches and make many phone calls to find out about additional support services such as unemployment assistance, vocational education and subsidized housing.

Imagine if you could access a comprehensive, "intelligent" service eligibility online program. After entering information about your client family you would receive a listing of services for which they may be eligible along with application requirements. You could then select each desired service and an online application would step you through the service request process re-using the data you already entered for the eligibility wizard. If any in-person interviews are required, you would receive a listing containing the nearest mapped office location to your client's address showing the closest T stations.

Benefits for the client and the Commonwealth:

- Information and access to government services for families all in one place
- Speedier determination of eligibility and access to needed services
- More complete and accurate data through automated edits and verification
- Transparency about all available support services

Barriers—why we cannot do this today. In today's IT environment the applications that support various government services are self-contained and do not communicate well or easily with each other. Functionality such as eligibility determination is tightly integrated with the rest of the application and cannot be easily exposed as a free-standing service component that can be shared with other applications.

Roadmap—in order to make this vision a reality the Commonwealth needs to:

- Collaborate across entities to create a common, shared way to identify individuals and organizations (*Key Initiative: Identity Management*).
- Modernize legacy systems so they can be built in a modular way in order to share common business processes such as eligibility determination (*Supporting Initiative: System Modernization*).
- Build and govern shared web services such as eligibility determination that involve common business processes while preserving the distinct business rules that govern individual government programs (*Key Initiative: Shared SOA Infrastructure*).

Constituents on the move

Scenario. You are a citizen or a business that is planning to relocate to a community in Massachusetts. Through various government programs the Commonwealth collects a wealth of data. This data is currently used by agencies to monitor and enforce compliance, measure program results and provide required reports to federal agencies. The data is sometimes aggregated in reports that are shared with the general public. Depending on specific needs the data then can be extracted from individual reports and combined to create useful information.

Imagine if you could go to Mass.gov, and, because information can be re-used and re-purposed—and because the Commonwealth is partnering with Massachusetts cities and towns to optimize value from our collective IT investments—you could select the community from a list and view a community profile that would include information such as location of schools with average MCAS scores, location of public transportation and major highways, location of public open space, information about environmental health status, information about property taxes, sex offender registry information, chronic disease rates, etc. Summary level information would be available with an opportunity to drill down to increasing levels of detail.

Benefits for the user and the Commonwealth:

- Expanding the access to information collected by government.
- Combining and reusing data to produce useful information that goes beyond the needs identified by individual government agencies.
- Automating data collection and storage resulting in easier analysis and storage.
- Exposing more data to more people, resulting in corrections and identification of missing data, thereby improving accuracy.

Barriers—why we cannot do this today. In today's IT environment data is often stored within individual applications, in effect "locking" it in place so it is difficult to access and reuse. In some instances data is still collected and stored manually or using desktop computer applications like Word and Excel which makes it difficult to aggregate to create useful information. Some agencies are reluctant to expose data they collect so that others can reuse it.

Roadmap—in order to make this vision a reality the Commonwealth needs to:

- Identify sources of agency data and expose the data to others so that it can be combined and presented in ways that are useful to the public within the constraints of applicable laws (*Supporting Initiative: System Modernization*).
- Determine standards for "meta-data" (data about the data) so that information can be combined in useful ways. Geo-coding to provide location information that can then be used in maps is one example (*Key Initiative: Shared SOA Infrastructure*).
- Store data in standard interoperable formats such as XML to maximize potential re-use (*Supporting Initiative: System Modernization*).
- Identify legal barriers to data sharing and reuse and create interagency agreements where appropriate (*Key Initiative: Shared SOA Infrastructure*).

Accurate and Timely Data

Public Safety agencies reaching new levels of efficiency and effectiveness

Scenario. You are a state trooper. You stop a driver for speeding. You have to check the identity and record of the violator and issue a citation. Later that information has to be referred to the Trial Court. Meanwhile, the driver must be notified about the process and informed of his rights and obligations.

Public safety entities have a need to share information not only among themselves but also with entities outside the traditional sphere of criminal justice (where authority permits), including public health, social and youth services, revenue department, and registry of motor vehicles, to name a few. Today many of these information interfaces are still done manually using paper or phone communications. Where automated interfaces exist they are developed for unique purposes and cannot be re-used or easily updated.

Imagine if you were able to issue electronic citations for traffic violations. The driver's license could be swiped using computer equipment in the officer's car. Information from the license could be used to pre-populate information on the citation and validate license and registration information in real time against the license database of the RMV. The citation information would then be transmitted electronically to the Trial Court's case management system. An easy to read, full-page copy would be given to the driver. Enhanced citation information could then be made available to the RMV and other appropriate state agencies where it can be used to take further administrative actions and to analyze ways to make Massachusetts roads safer.

Benefits for public safety officials, citizens, and the Commonwealth:

- The citizen receives citations that are more legible and have more space for instructions and explanation of rights and options.
- Improved timeliness and accuracy of citations—for example, GPS information can provide geographic coordinates.
- Improved accuracy, timeliness, accountability and traceability in the communication of citation information to the Trial Court and RMV.
- Easier availability of aggregate data that can be analyzed for patterns which can be used to inform public policy decisions, such as ensuring civil right protections.
- Greater overall safety for citizens of the Commonwealth.

Barriers—why we cannot do this today. In today's IT environment aging legacy applications operated by one agency cannot easily expose data that can then be shared with other agencies' applications. Criminal justice information networks are starting to show their age and are straining to support the transmission of real-time data, especially data types such as photographs and video.

Roadmap—in order to make this vision a reality the Commonwealth needs to:

- Modernize legacy systems so that services can be created to easily share data in real-time where appropriate (*Supporting Initiative: System Modernization*).
- Modernize the criminal justice information network so it can support increased volumes of real-time data exchanges for a variety of data types (*Key Initiative: Network Architecture*).
- Store data in standard interoperable formats such as Global Justice XML to maximize potential for re-use and interoperability across all jurisdictions (*Supporting Initiative: System Modernization*).
- Create governance structures, technology standards and shared infrastructure that can support integrated applications and data exchanges (*Key Initiative: Shared SOA Infrastructure*).

The Commonwealth protecting workers' rights and benefits

Scenario. You and other heads of Commonwealth agencies are charged with implementing new policy initiatives to protect workers' rights. Two such initiatives are Health Care Reform and combating the Underground Economy and Employee Misclassification. The success of Massachusetts' ground breaking health care reform initiative depends in part on contributions from individuals, employers and the state. To make sure all players are contributing to the success of the program the

state needs to ensure that employers are classifying employees appropriately. Misclassification is also a factor in the underground economy. The practice of employee misclassification: (1) exploits vulnerable workers and deprives them of legal benefits and protections; (2) gives unlawful businesses an unfair competitive advantage over lawful businesses by illegally driving down violators' taxes, wages, and other overhead costs; (3) defrauds the government of substantial tax revenues; and (4) harms consumers who suffer at the hands of unlicensed businesses that fail to maintain minimum levels of skills and knowledge. You must coordinate information with multiple agencies to support health care reform, to fight employee misclassification, and to bring violators to justice.

Imagine if authorized employees in your agency and other collaborating agencies could access an online application that would provide a single view of employer information including the classification of individual employees. The data for this application is aggregated in real time from various agency databases. The application includes business logic that can flag inconsistencies for further investigation. The application can also generate reports that can be sent electronically to authorized recipients for follow-up and enforcement actions.

Benefits for citizens and the Commonwealth:

- More employees are classified correctly and receive the benefits and protections to which they are entitled.
- The Commonwealth ensures that the proper payroll and income taxes are collected.
- Aggregate data is more easily available to state entities to analyze trends which can be used to inform public policy decisions and enforcement actions.
- State employees can conduct their investigative, follow up and enforcement responsibilities more efficiently and effectively.

Barriers—why we cannot do this today. In today's IT environment aging legacy applications operated by one agency cannot easily share data with other agencies' systems. Currently there is no common, shared way to identify individuals and organizations or to resolve the identities of individuals and organizations known to multiple agencies.

Roadmap—in order to make this vision a reality the Commonwealth needs to:

- Modernize legacy systems so that services can be created to easily share data in real-time where appropriate (*Supporting Initiative: System Modernization*).
- Store data in standard interoperable formats such as XML to maximize potential reuse (*Key Initiative: Shared SOA Infrastructure*).
- Collaborate across entities to create a common, shared way to identify individuals and organizations (*Key Initiative: Identity Management*).
- Identify legal barriers to data sharing and reuse and create interagency agreements where appropriate (*Key Initiative: Shared SOA Infrastructure*).
- Create governance structures, technology standards and shared infrastructure that can support integrated applications and data exchanges (*Key Initiatives: Shared SOA Infrastructure, Network Architecture*).

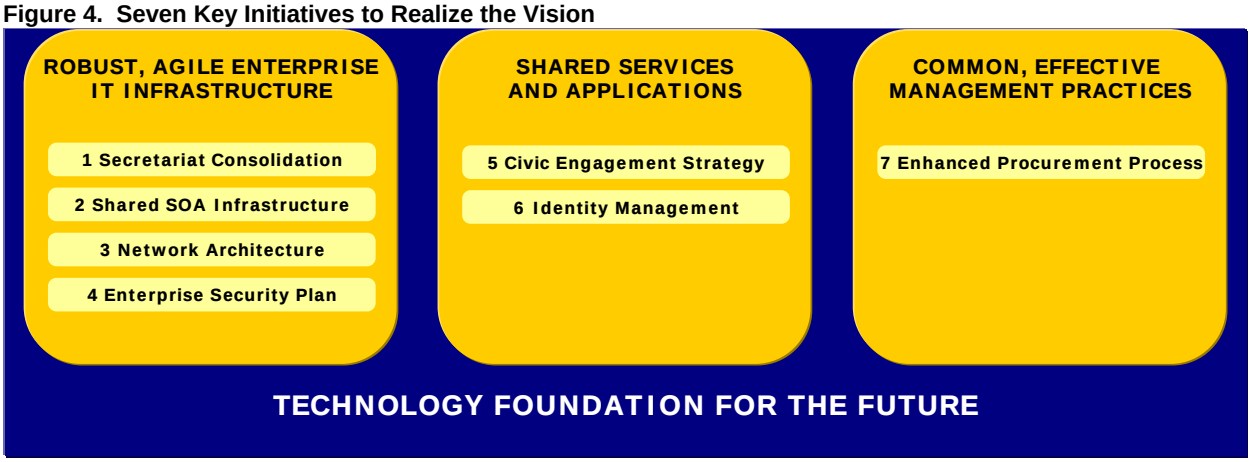
B. Pursuing the vision: Seven key initiatives

Based on the conclusions of the workshop and as subsequently refined in discussions with the principal IT advisory groups, the Commonwealth IT community has identified seven key initiatives that must be pursued to build the technology foundation for the future, which is a prerequisite for later projects that can help us to realize the vision. The key initiatives fall into three foundational "building block" categories:

- Robust, agile enterprise IT infrastructure. The IT infrastructure comprises the basic technical underpinnings upon which rest the business services and applications that, in turn, support government functions.
- Shared services and applications. These are the systems and services that perform vital government business functions. Some of these systems, or parts of them, perform functions that are useful across multiple agencies.
- Common, effective management practices. These are the policies, procedures, and practices necessary for efficient, transparent management of IT systems, operations, and services. Generally, these practices should be adopted uniformly across state agencies.

The following diagram shows how the key initiatives fall into these three foundational building blocks. Please note that there are numerous other elements that make up the foundational building blocks, many of which are in place today. Some of them may require renewal or upgrade over time. In addition there are four supporting initiatives described in Section IV.C that are underway now and that will also contribute to building the foundation.

Figure 4. Seven Key Initiatives to Realize the Vision



Although they will be challenging and complex to implement, completing these seven initiatives will have an enormous impact on the Commonwealth's ability to build efficient and effective systems in the future.

Robust, agile enterprise IT infrastructure

1. Secretariat consolidation

Description	Plan and implement initiatives to improve the efficiency and effectiveness of IT services across agencies for each Secretariat within the Executive Department.
Goals	• Align Secretaries' IT resources with their business strategies and priorities • Rationalize and standardize IT resources available to agencies • Create efficiencies and maximize resources • Align Secretariat IT plans with the Commonwealth IT Strategic Plan
Major components	• Establish Secretariat Chief Information Officer (SCIO) for each Secretariat • Develop standard approach/best practices • Identify enabling fiscal and legal foundation • Develop consolidation plans

2. Shared service oriented architecture (SOA) infrastructure

Description	Work collaboratively to develop shared infrastructure services that can be used by multiple agencies to support Service Oriented Architecture applications
Goals	• Achieve efficiencies through reuse • Enable appropriate data sharing across agencies • Facilitate the implementation of modular system development • Develop agile, flexible infrastructure and systems • Implement effective cross-agency governance for shared infrastructure
Major components	• Establish an SOA outreach, evangelism, education program • Build organizational competency to support SOA infrastructure • Implement key infrastructure components in a phased approach • Establish integration specifications and federation requirements • Define governance and repeatable processes for use of shared infrastructure

3. Network architecture

Description	Develop an enterprise network architecture plan that addresses voice/data convergence, reduces duplication and redundancy, and accommodates scalability for future needs
Goals	• Implement a coherent network architecture for the Commonwealth • Increase overall efficiency of Commonwealth networks • Ensure the scalability of Commonwealth networks
Major components	• Establish collaborative planning process • Inventory current state and identify future needs • Identify network requirements and document target architecture • Develop roadmap and resource requirements

4. Enterprise security plan

Description	Develop an enterprise-wide IT Security Plan consistent with established best practices
Goals	• Improve education and awareness of cyber security • Ensure critical systems are well secured • Improve responsiveness to security incidents
Major components	• Establish work group • Identify audience, scope and content • Develop plan • Implement plan and monitor effectiveness

Shared services and applications

5. Civic engagement strategy

Description	Develop a strategy to ensure that IT investments are designed to promote civic engagement with the aim of increasing state government transparency and access
Goals	• Improve transparency of and engagement with government processes • Promote accessibility and usability of government applications and services • Leverage expertise of private sector (academia, corporations, non-profits)
Major components	• Include public comments as part of IT planning • Promote engagement in design of applications (usability testing, focus groups) • Elicit continuous input into effectiveness and ease of use of applications • Identify best practices, tools to promote civic engagement • Leverage the Mass.gov portal as a vehicle for engagement

6. Identity management

Description	Develop an enterprise identity management framework for Commonwealth employees, business partners and citizens
Goals	• Ensure public confidence in the security of Commonwealth systems and data • Enable secure, reliable, simplified sign-on for access to government transactions and information • Build on/re-use current agency implementations to speed enterprise adoption
Major components	• Coordinate an Identity Management Summit to share history and current capabilities • Analyze current implementations to determine expandability • Identify known business requirements, including security and privacy requirements • Plan and implement enterprise identity management for Commonwealth employees as a first phase

Common, effective management practices

7. Enhanced procurement processes

Description	Coordinate IT procurement efforts across entities of the Commonwealth to leverage our purchasing power for best price and optimal services
Goals	• Lower licensing and maintenance costs for individual agencies and the Commonwealth as a whole by taking advantage of volume discounts • Achieve consistency of vendor support and services across agencies • Reduce costs and delays for IT projects by simplifying complex, paper intensive procurement processes and leveraging automation wherever possible • Align Commonwealth procurement rules and practices for IT goods and services with the imperatives of the industry (i.e. shorter product cycles, frequency of business consolidation, etc.)
Major components	• Negotiate Commonwealth enterprise licenses for highly utilized vendors • Coordinate vendor management issues across agencies • Project future needs for major vendor products and aggregate purchases to maximize volume discounts • Streamline procurement processes within existing regulations • Work with OSD to identify opportunities for improvement of current regulations governing IT procurement

C. Supporting initiatives

The initiatives described below are already underway. They are included in this strategic plan to underscore their importance in building the foundation necessary to achieve the vision.

Second data center

Description	The new IT Bond provides funding for a second Commonwealth Data Center located in Springfield
Goals	• Increase the data center capacity for Commonwealth systems • Improve the availability of Commonwealth systems • Create a state-of-the art “green” data center
Major components	• Complete the site selection process • Obtain agency application recovery requirements • Design the new data center to meet the program requirements and Greening-of-IT objectives • Construct the new data center • Commission the data center and migrate systems/applications

System modernization

Description	The new IT Bond provides funding for the modernization of enterprise mission-critical Commonwealth systems
Goals	• Re-engineer business processes and where appropriate continue to move services online • Re-architect systems using Service Oriented Architectures while leveraging existing investments where possible • Create shared infrastructure and business components that can be used by other applications and agencies • Build accessibility features into systems where appropriate
Major components	• Draft vision and conceptual architecture for each system • Evaluate marketplace using mechanisms such as Requests for Information • Construct procurement and contract using best practices for complex IT projects • Manage project using Commonwealth standard project management methodologies

IT recruitment and training

Description	Implement a coordinated approach for IT staff recruitment and training across the enterprise. A partnership with UMass is being implemented to provide IT training for staff and recruitment of graduating computer science majors for permanent jobs.
Goals	• Provide a cost-effective mechanism to ensure the currency of skills for IT staff • Provide a pipe-line of new talent to address potential staffing shortfalls presented by an aging workforce • Prevent duplication of training and recruitment efforts by taking an enterprise approach
Major components	• Assess results of pilot • Identify additional training needs • Identify consistent funding model • Develop a plan to scale program to meet needs • Manage and oversee program • Evaluate program results

Project management methodology

Description	Establish consistent project management standards across all agencies to ensure projects are completed on-time, on-budget and on-value
Goals	• Leverage industry best practices to develop the "Commonwealth Way" for project management • Increase level of skills and proficiency for Commonwealth project managers • Produce artifacts that will enable effective project oversight
Major components	• Draft project management methodology and standards • Train staff on new methodology • Evaluate effectiveness continually, and modify methodology as necessary

V. Roadmap for implementation

A. High level implementation strategy

Successful implementation of this plan—that is, completing the initiatives identified above—depends on a few key factors:

- Collaborative spirit. Because so many of the initiatives reach across the boundaries of government structure, we must continue to work together toward our common goals, engaging people at all levels.
- Resources. While several of the initiatives will be supported through bond funding, others may require that participating agencies carve out modest resources, often in the form of staff time, to accomplish the goals.
- Focus and momentum. The implementation strategy outlined below is designed to assure focus and accountability for each of the initiatives. Moreover, those efforts already underway have gathered momentum, and the implementation plan helps to make certain that this will be sustained.

To foster and promote these success factors, each initiative will have a:

- Convener to act as point person for the initiative
- Steering group or task force to monitor progress and resolve issues
- Clear schedule and set of milestones

Each steering group will be expected to:

- Create a charter for the initiative that clearly outlines specific project goals, scope, and expected outcomes; impact and benefits to be realized, including explicit success measures; project workplan, including priorities and phases if applicable; stakeholders; resources required; and risks and their mitigation.
- Review the history of similar efforts in the past to understand potential pitfalls and avoid them moving forward.
- Seek broad participation from across government agencies, as appropriate.
- Prepare quarterly reports summarizing project status and progress measured against milestones.

It is the intention of the CIO of the Commonwealth that each steering group will be provided with the following support:

- Staff support (over and above regular project staffing) to assist with agendas, reporting, and other staff work that may be required between meetings.
- Templates for charters, workplans, and progress reports.
- A group collaboration tool or wiki to assist with communications and to store key documents for the initiative.

In addition, ITD's Project Management Office will assign a program manager to oversee the portfolio of strategic initiatives. As an early step, the program manager will compile the workplans and timelines from the individual initiatives and superimpose them on an overall timeline. The program manager will provide regular reports to the IT Advisory Board, CIO Cabinet and other relevant stakeholders summarizing status and progress measured against milestones for each project in the portfolio.

B. Responsibilities

The following table identifies the convener and steering group for each of the strategic initiatives.

Table 3. Responsibilities for Strategic Initiatives

	Convener	Steering Group
Robust, agile enterprise IT infrastructure		
1 Secretariat consolidation	Chief Information Officer	CIO Cabinet
2 Shared SOA infrastructure	Chief Technology Officer	SOA Task Force*
3 Network architecture	Chief Technology Officer	Network Task Force*
4 Enterprise security plan	ESB Co-Chairs	Enterprise Security Board
Shared services and applications		
5 Civic engagement strategy	Chief Applications Officer	Civic Engagement Task Force*
6 Identity management	Chief Technology Officer	IDM Task Force*
Common, effective management practices		
7 Enhanced procurement processes	Chief Strategic Planning Officer	ITD/OSD Task Force*
Supporting initiatives		
Second data center	Director of Data Center Planning	Data Center Steering Committee
Systems modernization	Director of PMO	Capital Program Management Office
IT recruitment and training	ITD HR Director	Training and Recruitment Task Force
Project management methodology	Director of PMO	PMO Oversight Group

* New task force formed for this purpose. Others are existing advisory groups.

C. Guiding principles

In pursuing the IT strategy for the Commonwealth, we will be guided by a set of principles designed to foster prudent use of scarce resources, to promote industry best practices for protection of information, to encourage common approaches that enable integration and interoperability, and to assure accountability in all aspects of IT implementation and operation. We will apply these principles in all decision-making, including priority determination, design approaches, collaborations, and resource deployment.

Guiding Principles for IT Decision-Making

- Target IT investments to maximize business value and impact
- Make service to constituents a key design objective for systems that serve
  - Citizens and businesses, with focus on civic engagement and single face of government
  - State workers, with focus on streamlined operations and ease of use
- Ensure accessibility to IT systems for people with disabilities
- Reduce total cost of ownership of all systems by factoring ongoing flexibility and low-cost maintainability into designs and approaches
- Favor enterprise approach over agency/application-centric approach where possible to reduce costs and promote integration and interoperability, via
  - Enterprise-wide infrastructure
  - Shared services
  - Reusable components
  - Shared common data
  - Consolidated operations
- Follow open standards where appropriate to reduce dependency on specialized skill sets and proprietary products and services
- Protect information privacy and security by enforcing security policies and standards
- Build in data to enable assessment and improvement of government processes
- Build clear accountability and integrity into all IT-related management processes to ensure
  - Disciplined project management and execution
  - Transparent alignment of funding and chargebacks with true costs
  - Open and competitive procurement practices

VI. Conclusion and next steps

The Commonwealth is facing difficult economic times and must take whatever actions possible to ensure that state government can continue to provide services to the public. While not the whole answer by any means, information technology offers the promise of new and more effective services while at the same time leveraging scarce resources for greater efficiency.

As next steps, we will effectively communicate the plan to key stakeholders, including policy and legislative leaders, and keep them apprised of the progress we make in implementing the key initiatives. The program manager will be assigned and the individual conveners will be charged with initiating work for each initiative. We will review the plan on an annual basis to make necessary updates and adjustments.

We are at a unique moment in time: The needs are great, but we have the resources for wise investment to help meet those needs, a clear sense of urgency to move forward, and the collective will to act. This plan, with its far-reaching but achievable vision and roadmap for action, is a blueprint for investment of energy and resources over the next three years—an IT strategy for the Commonwealth.

Appendix A
IT Governance / Advisory Structure

	Membership	Roles
IT Advisory Board (ITAB)[4]	• Membership and charter are defined by statutory language • ITAB is primary enterprise (cross-branch, constitutional offices) IT governance group	• Participate in enterprise IT strategic planning • Monitor progress of strategic plan implementation • Provide IT policy advice • Provide capital funding strategy advice • Foster enterprise collaboration and coordination
CIO Cabinet[4]	• Secretariat Chief Information Officers (SCIOs) • Directors of large data centers (e.g. UMass) • CIOs/Directors of large MITC customers	• Participate in enterprise IT strategic planning • Monitor progress of strategic plan implementation • Provide advice on ITD Goals/Objectives planning • Coordinate approach for vendor relations • Provide input into the process for solicitation of IT investment project requests • Participate in the review and prioritization of project requests • Make recommendations regarding enterprise project portfolio • Participate in critical project reviews
IT Council[4]	• CIOs/IT Directors and staff from agencies	• Participate in enterprise IT strategic planning • Participate in issue-specific focus groups • Foster cross-agency collaboration • Share best practices and foster communication • Make recommendations to other governance groups

[4] Please see the ITAB, the CIO Cabinet, and IT Council pages on ITD's web site for more information.

Appendix B
Workshop Program Overview and Agenda

Visioning the Future: Developing the IT Strategy for the Commonwealth of Massachusetts

June 3, 2008

Program Overview

The program *Visioning the Future: Developing the IT Strategy for the Commonwealth of Massachusetts* will bring together key leaders from across the Commonwealth to envision the future of citizen services and develop a supporting information technology strategy. The goal of this program is to harness the collective insights of the group and to develop a *Vision and Action Plan* that will specify and guide future Commonwealth-wide IT initiatives.

Context

The environment in which the Commonwealth of Massachusetts operates is changing swiftly. Citizen expectations for enhanced and real-time services, an aging workforce and constituent demographic, emerging technologies and forms of organization, competition both regionally and globally, and constrained resources will impact Massachusetts in direct and measurable ways.

Given this changing environment, the Commonwealth needs to address a set of critical questions and choices in the way its IT strategy helps agencies and partners responds to these forces of change. Broadly, these are:

- Where is the Commonwealth today on IT-enabled citizen services and related issues? How do we compare to our past and other governments?
- Where do we want the Commonwealth to be in the near and long term? How do we need to position ourselves relative to other regions?
- How can we assess the value, build the capacity and generate the support for the initiatives necessary to achieve our vision? How fast can we and how fast should we move?

As a result of this mix of demands, options and choices, the next phase of IT-enabled citizen services in Massachusetts will require initiatives that involve more stakeholders, more collaboration, new ways to work together, and newer and substantially more powerful technologies than the challenges undertaken to date. As is true also for other governments, but perhaps in different ways, Massachusetts will require new capabilities, working models, and relationships that will involve its political, program, and technology leaders.

At this session, we will begin the process of addressing these challenges and creating a pathway to achieve our collective goals.

Program Agenda

Tuesday June 3, 2008	
	Location: **Harvard Kennedy School** **79 JFK Street, Cambridge MA 02138**
8:00 – 8:20	**Registration**
8:20 – 8:30	**Welcome & Setting the Stage** **Introduction - Anne Margulies, Assistant Secretary and CIO** **Opening Remarks - Leslie Kirwan, Secretary, Executive Office for Administration and Finance**
8:30 – 8:50	**Introduction: Purpose, People, Process** **Anne Margulies** This session will address the purpose of the workshop, introduce the participants and outline a three-stage process for defining: 1. Where are we? (Commonwealth compared to past, to other governments) 2. Where do we want to go? (Vision and sifting through existing and new options) 3. How can we get there/next steps? (Identify initiatives and how to work collaboratively to maximize returns, minimize risks)
8:50 – 9:15	**Structure for Our Work Today** **Jerry Mechling, Harvard Kennedy School** This session will present a framework for decision-making and provide the local and national context for the rest of the day's discussions. :

	• Elements of strategy: Capacity – Value – Support • Content focus areas: Architecture – Services – Management • Government learning curves • Where are we compared to the past, benchmark studies/scorecards, other state government best practices?
9:15 – 10:15	**Panel: Perspectives on the current state of IT in the Commonwealth** **Facilitated by Jerry Mechling, Harvard Kennedy School** **Panelists: Anne Margulies, Assistant Secretary and CIO** **Tom Curran, EOHHS Information Officer** **Martin Benison, State Comptroller** This panel will discuss the current state themes of IT in the Commonwealth, including strengths and challenges, form the following perspectives: • The enterprise IT perspective • A secretariat IT perspective • An agency leader perspective
10:15 – 10:30	Break
10:30 – 11:45	**Where do we want to be?** **Jerry Mechling, Harvard Kennedy School** This session will present views and ideas from the pre-workshop Compass diagnostic including: • Incoming ideas on vision • Incoming risk/return "blink" assessments on a list of ~ 12 ideas • Plenary discussion of top options for further analysis including any new ideas • Small group assignments
11:45 – 1:30	**Lunch and Working Groups** In this working lunch session small groups will discuss and assess the risks and returns of the ideas identified as top options for further analysis. Groups should identify the top 3-5 ideas to bring back to the group. .
1:30 – 3:00	**Where do we want to be? – Working Group reports** **Facilitated by Jerry Mechling, Harvard Kennedy School** In this session the working group leads will report back on the top ideas identified by their groups. Through further group discussion a consensus will be reached on the top 3-5 initiatives

	to be included in the Strategic Plan.
3:00 – 3:20	**Break**
3:20– 4:00	**How can we get there? Next steps?** **Facilitated by Jerry Mechling, Harvard Kennedy School** This session will discuss what actions need to be taken to harvest the rewards, avoid risks, conduct further analysis and identify major milestones for each of the top initiatives chosen.
4:00 - 4:30	**Conclusions** **From Harvard's perspective – Jerry Mechling** **From the Commonwealth's perspective – Anne Margulies**
5:00	**Optional Networking and Cocktail Reception** Legal Sea Foods Restaurant, Charles Hotel, Harvard Square

Appendix C
Workshop Participants

Name	Title	Agency
Claritza Abreu	Assistant Commissioner and CIO	Department of Mental Health
Pat Ainsworth	Chief Information Officer	Mount Wachusett Community College
Timothy Anderson	Director of Information Technology	Office of Consumer Affairs and Business Regulation
Lou Angeloni	Chief Financial Officer	Information Technology Division
Francis Anglin	Chief Information Officer	Massport
Dick Arscott	Chief Information Officer	Massachusetts General Court
Paul Bartlett	Chief Technology Officer	Information Technology Division
Martin Benison	Comptroller of the Commonwealth	Office of the Comptroller
John Beveridge	Deputy State Auditor	Office of the State Auditor
Brad Blake	Director of New Media and Online Strategy	Office of the Governor
Claudia Boldman	Chief Planning and Strategy Officer	Information Technology Division
Nancy Burke	Director of MIS	Operational Services Division
Ron Calabria	Chief Information Officer	Office of the Attorney General
Ray Campbell	Executive Director and CEO	Mass. Health Data Consortium
Maureen Chew	Chief Applications Officer	Information Technology Division
Joan Clark	Chief Information Officer	Dept. of Early Education and Care
Elizabeth Clay	Director of Grassroots Governance	Office of the Governor
Anne Collins	Legal Counsel	Executive Office of Transportation and Public Works
Paul Connelly	Deputy Secretary for Homeland Security	Executive Office of Public Safety and Security
Patrick Cronin	Interim Chief Information Officer	Bridgewater State College
Tom Curran	Secretariat Information Officer	Executive Office of Health and Human Services
Jim Daniel	Chief Information Officer	Department of Public Health
Paul Dietl	Chief Human Resources Officer	Human Resources Division
Mary Finlay	Deputy Chief Information Officer	Partners Health Care
Lawrence Gilmond	Chief Applications Officer	Information Technology Division
John Glennon	Chief Information Officer	Executive Office of Labor and Workforce Development
Eileen Glovsky	Deputy Treasurer	Office of the State Treasurer

Name	Title	Agency
David Gray	Vice President for IT & CIO	University of Massachusetts
John Grossman	Undersecretary of Forensic Science and Technology	Executive Office of Public Safety and Security
Darrel Harmer	Director Portfolio Management Office	Information Technology Division
Jane Kadlubkiewicz	Planning & Communications Specialist	Information Technology Division
Rachel Kaprielian	Registrar	Registry of Motor Vehicles
Martin Kaye	Chief Information Officer	Executive Office of Housing and Economic Development
Jeffrey Lazarus	Consultant	Information Technology Division
Stuart Lecky	Chief Operating Officer	Information Technology Division
John Letchford	Deputy Chief Information Officer	Information Technology Division
David Lucal	CIO for the Appellate Courts	Supreme Judicial Court
Robert Maier	Director	Massachusetts Board of Library Commissioners
Meagan Maloy	Legislative Director	Office of Senator Jack Hart
Anne Margulies	Assistant Secretary and Chief Information Officer	Information Technology Division
Paul McLaughlin	Chief Information Officer	Office of the State Auditor
Peter Navarro	Assistant Treasurer, Information Technology	Office of the State Treasurer
Bill Oates	Chief Information Officer	City of Boston
Colleen Ogilvie	Deputy Registrar	Registry of Motor Vehicles
Susan Parker	Director of Mass.Gov	Information Technology Division
Brandon Pender	Research Analyst	Office of Representative Dan Bosley
Vincent Piccinni	Deputy Commissioner for Information Services	Department of Revenue
Deborah Quinn	Chief Information Officer	Mass Department of Environmental Protection
James Silveria	Chief Information Officer	Executive Office of Transportation and Public Works
James Slater	Chief Information Officer	Executive Office of Public Safety and Security
Jason Snyder	Chief Technology Officer	Executive Office of Health and Human Services
Dan Walsh	Director of Security Assessment & Assurance	Information Technology Division
Bob Wilbur	Chief Information Officer	Executive Office of Energy and Environmental Affairs

Name	Title	Agency
Curtis Wood	Executive Director	Massachusetts Criminal History Systems Board
Ellen Wright	Director of Human Resources	Information Technology Division
Sharon Wright	Acting Chief Information Officer	Office of MassHealth